

a similar number of cycles in the non-cirrhotic for both the simple and complex model. This was done by calculating: (1) the expected number of cycles in FOF3 before transitioning to F4 (E) in the simple model; (2) the minimum number of cycles from Fn to F4 adjusted for the fibrosis stage distribution; (3) the  $(I-T)^{-1}$  matrix equal to the average number of cycles in each Fn state based on (1) and (2); (4) the T matrix corresponding to the transition probability for Fn to Fn+1. **RESULTS:** Based on a FOF3 to F4 TP of 0.04 and a fibrosis stage distribution of 23% F0 & F1, 27% F2 & F2, we obtained Fn to Fn+1 TP = 0.097. For both the simple and complex models E was equal to 25. However, the sum of cycles in the non-cirrhotic states after only 50 cycles were 20.12 and 21.92 for the simple and complex models respectively. Taking into account a 2% discounting the sums were 13.83 and 8.59. **CONCLUSIONS:** Markov models are sensitive to their structure, even when properly fitting the TP. For HCV, changing from a simple to a complex model is not trivial.

#### PRM38

##### THE COST OF TREATMENT OF THE NEW ANTIVIRAL THERAPIES AGAINST THE HEPATITIS C VIRUS

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**OBJECTIVES:** The goal of our poster is to analyse the costs of treatment of the new antiviral therapies against the Hepatitis C virus (HCV) submitted to the Department of Health Technology Assessment of the National Institute of Pharmacy and Nutrition. **METHODS:** In our analysis, we examined the cost of treatment with the available interferon (IFN)-based and IFN-free therapies based on the current PUPHA database from the official website of National Health Insurance Fund of Hungary. The cost estimates have been made in two different ways both from the payer's view. The first calculation does not take into account the success of therapy as it's based on the SPC with the assumption of a complete possible length of the treatment. The second calculation method is based on the sustained virologic response (SVR) which has become the best indication of therapeutic success. **RESULTS:** Performance-based risk-sharing arrangements should be based on an endpoint which is meaningful both from the payer's and the patients' perspective, which can be measured objectively and which depends primarily on the applied therapy. This endpoint is the SVR rate in the treatment of HCV. The SVR rates were between 34.4% and 95% in the relevant clinical studies. The cost of the therapy ranges between 8.4 million HUF and 31 million HUF, if we do not take into account the SVR rates. **CONCLUSIONS:** Following a more than two decades of intense research, the interferon-free era of hepatitis C treatment has arrived. The availability of IFN-free regimens allows many patients who could not be treated previously because of medical or psychiatric contraindications or an inability to tolerate IFN to receive treatment. Introduction of these new HCV drugs put a financial strain on the payer. The use of performance-based financing is a way to maintain the balance of the budget.

#### PRM39

##### RESOURCE USE MEASUREMENT IN TRIALS CONDUCTED IN CARE HOMES: A STUDY OF LEVEL-OF-AGREEMENT BETWEEN DATA COLLECTED FROM GP RECORDS AND CARE HOME RECORDS

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**OBJECTIVES:** Methodological research focused on resource use measurement has been limited in comparison to the amount of research focussed on measuring outcomes within the economic evaluation context. This study was designed to assess the level-of-agreement between two different sources of health and social care resource use data collected on care home residents. **METHODS:** The methods were informed by a review of level-of-agreement studies concerned with resource use in older people. In the base case, resource use data collected from both GP medical records (electronic records) and care home records (paper-based records) on 362 care home residents were obtained as part of the CAREMED cluster randomised controlled trial. Descriptive statistics were explored before assessing level-of-agreement through percent agreement, 95% limits of agreement, and Lin's concordance correlation coefficient (CCC). Sensitivity analyses excluded non-users and tested timeframe. Factors affecting the magnitude of difference were explored using multi-level modelling. **RESULTS:** Several resource items (number of GP, out of hours GP and podiatrist contacts) were found to have substantial agreement (0.61 to 0.80) between the GP records and care home records according to the CCC. The number of total visits, dietician, paramedic and SLT contacts showed moderate agreement (0.41 to 0.60). Most resources showed a poor (less than 0.00) or slight (0.00 to 0.22) level-of-agreement either due to care home records (for chiropodist, music therapy, and social worker contacts) or GP records (for phlebotomist and practice nurse) recording a greater number of visits. Patient classification (residential/nursing), number of falls, number of STOPP criteria met, number of medications and comorbidities significantly affected the magnitude of differences observed. **CONCLUSIONS:** This research suggests that both sources of data are reliable for some resources but not others, indicating dual sources may be necessary where a wider perspective is important and feasible in terms of costs of data collection.

#### PRM40

##### ARE QALYS AN APPROPRIATE MEASURE TO USE WHEN EVALUATING PUBLIC HEALTH INTERVENTIONS IN THE UK?

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**OBJECTIVES:** Quality-adjusted life years (QALYs) are commonly used in health technology appraisals, including those by NICE in the UK. However, QALYs only include 'health-related' quality of life (QOL) which may not apply to interventions that have benefits and costs that fall outside of the NHS. NICE recommends that public health economic evaluations take a cost consequence or cost benefit approach and present a public sector or societal perspective. However, it is not clear how or if the costs and benefits that fall outside the NHS should be incorporated into this

threshold for cost-effectiveness. The objective of this research was to investigate the methodology used in public health modelling, to determine the effect that this has on predicted cost-effectiveness and to make recommendations about the most appropriate methods to use. **METHODS:** We reviewed past NICE public health guidance and the associated economic evaluations to assess if methods tended to be based on the ICER alone or if other benefits are taken into account. In those instances where non-health benefits are included, we evaluated how this was done and if it was done consistently. **RESULTS:** Results showed that a range of methodologies were used to evaluate public health interventions in the UK and that the methods used were inconsistent. ICERs were often calculated despite not always being the most appropriate measure. There tended to be considerable uncertainty around data inputs in the majority of economic evaluations. **CONCLUSIONS:** The methods used to evaluate public health interventions in the UK vary, mostly by the type of economic evaluation and the perspective taken. ICERs were not always the most appropriate outcome. Variations in the methods could result in inconsistent recommendations across Public Health Guidance.

#### PRM41

##### BUDGET IMPACT ANALYSIS IN THE UK SETTING – KNOW YOUR AUDIENCE

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**OBJECTIVES:** When developing a budget impact model (BIM) the design stage is key. A particular element which should be carefully considered during the design phase is the perspective and in particular who the audience will be. The objective of this study was to identify who the potential users and healthcare decision-makers may be and what elements should be captured within the BIM to meet their requirements within a UK setting. **METHODS:** Research was conducted in a staged approach. The first stage involved identifying the different types of potential users of a BIM. Following identification of these different users, the next stage of research sought to identify the cost criteria each user is expected to assess a BIM against, thus informing what should be captured in an analysis. The final stage then identified what cost categories are required in a BIM to satisfy these criteria. **RESULTS:** Two main users of a BIM were identified: providers and commissioners. The criteria that a provider is expected to consider is: what is the incremental cost and resource use implications of providing the intervention in question? What is the incremental income that will be received for providing this intervention? Whereas, the criteria that a commissioner is expected to consider are: what is the incremental cost of commissioning the provision of the intervention? Is there any added value in terms of quality, capacity or outcomes? An example of appropriate costs which are aligned with the perspective of a provider and commissioner, would be NHS reference costs and national tariffs, respectively. **CONCLUSIONS:** Determining the audience of a BIM is crucial in designing a model fit for purpose. Key requirements of a BIM will be dependent on the audience, in particular capturing costs appropriately. Research should be conducted for other countries.

#### PRM42

##### STRUCTURE OF HEALTH-RELATED DIRECT COSTS IN UKRAINE - THE FIRST STEP OF ANALYSIS

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**OBJECTIVES:** Now in Ukraine state, regional and private budgets on country, regional, institutional and personal levels have substantial level of insufficiency. Human productivity is the main national asset for economic recovery, so, health care system could make significant impact and guarantee sustain economic growth. Therefore, every decision within Ukrainian healthcare system must be justified clinically and economically. With the purpose to prepare basis for economic justification the analysis of health-related cost categories specific for Ukraine was performed. **METHODS:** Direct cost are specific for Ukrainian Healthcare system were drawn in 3 main categories: outpatient, inpatient and emergency (pre-hospitalization) costs. Macroeconomic result categories, Tax and Work policy, tariffs for services in healthcare system and standards for care were analyzed to determine cost units and cost compositions. Four payer perspectives were considered: state budget and funds; patient and family; employer; insurance company. **RESULTS:** In result, health-related costs are specific for Ukraine and approaches for calculation were determined. Outpatient costs: outpatient visit costs (physician and nurse salary); diagnostic measures costs (laboratory or instrumental required by healthcare standards); treatment costs (basis or course required by healthcare standards). Inpatient costs: hospital-days costs (daily accommodation & care); diagnostic measures costs (laboratory or instrumental required by healthcare standards); treatment costs (single intake or course required by healthcare standards). Emergency costs: visit costs (physician and nurse salary); diagnostic measures costs (laboratory or instrumental required by healthcare standards); treatment costs (single intake required by healthcare standards); transportation costs (driver salary, fuel and amortization costs). **CONCLUSIONS:** Costs are drawn in current study to be validated internally in Ukraine with the State-Healthcare, Legislation, Economic experts. An external validation to be performed as well by the comparison of costs and cost categories with the same in other countries. After the validation, current cost matrix is planned to be integrated in population model for Cost of Illness Analysis.

#### PRM43

##### CONSTRUCTION OF SIMULATION TECHNIQUES FOR DEVELOPMENT OF OPTIMAL CERVICAL CANCER SCREENING STRATEGIES: EXPERIENCE OF UKRAINE

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